8. Luann

Program Name: Luann.java **Input File: luann.dat**

This past summer Luann collected data on how many turtles she saw in the pond behind her home. Several days in a row she would go down to the creek and count the turtles in the pond and then record her findings in a data file. Luann didn't count turtles every single day. She would go on consecutive days for a while then skip a few days. She never counted turtles more than nine days in a row. Now that summer is over, Luann would like to chart her findings. She wants a different chart for each set of consecutive days that she counted turtles. Let's help her write a program that will process the data and print out the charts she wants.

Input: A single value C representing the number of charts to be printed. N will be followed by C sets of data each beginning with a number N that represents the number of coordinate pairs to follow. Each coordinate pair will be on a separate line where the first value is x and the second value y. Both x and y will be greater than or equal to 1 and less than or equal to 9. The x values will always begin with one and continue in sequential order with no skips. For example, if there are 7 coordinate pairs, the x values will always be 1 – 7 without any skips.

Output: A chart for each set of data. Each chart should have an x and y axis labeled starting at one (1). The y axis should be formed using pipes (|) and the x axis should be formed using underscores (_). The y axis and its labels should take up two spaces in each row and the x axis and its labels should take up two rows. Each data point (y value) should be marked with a capital X. Any space within the chart that does not have an axis, a label or a data point must be filled with a blank. Each chart should be followed by the line, "=====".

Sample input:

```
2
7
1 1
2 2
3 3
4 4
5 5
6 3
7 6
9
1 1
2 4
3 9
4 9
5 9
6 7
7 5
8 2
9 1
```

Sample output:

```
6|      X
5|    X
4|   X
3|  X  X
2| X
1|X

  _______
  1234567
=====
9|  XXX
8|
7|     X
6|
5|      X
4| X
3|
2|       X
1|X       X

  _________
  123456789
=====
```